

Biowulf Command Summary

Command	Description	Example
Job submission		
qsub	Submit a job.	qsub -l nodes=1 myjobscript qsub -l nodes=1:c24:g24 myjobscript <i>(request a node with 24 GB memory and 24 cores)</i> qsub -l nodes=1,mem=300gb,ncpus=4 myjobscript <i>(request 300 GB memory and 4 cpus on a shared node)</i> qsub -l nodes1,matlab=1 jobscript <i>(request one Matlab license)</i>
qsub -I	Allocate an interactive node	qsub -I -l nodes=1 qsub -I -l nodes=1:gpfs <i>(if your data dir is on the GPFS filesystem)</i>
swarm	Submit a large number of independent jobs.	swarm -f swarmfile swarm -R gpfs -g 4 -t 4 swarmfile <i>(submit a swarm which must run on GPFS nodes, and each command in the swarm requires 4 GB of memory and 4 threads (cores))</i> swarm -b 10 -f swarmfile <i>(bundle your commands)</i>

Job deletion		
qdel	Delete a job	qdel jobid qdel -Wforce jobid <i>(if node is hung)</i> qdel `qselect -u username -s Q` <i>(delete only queued jobs)</i>
swarmdel	Delete a whole swarm	swarmdel jobid <i>(jobid of one job in the swarm)</i>

Job status		
qstat	Check status of jobs.	qstat -u username <i>(your jobs only)</i> qstat -s jobid <i>(short details about job)</i> qstat -f jobid <i>(full details about job)</i>
userjobs	List all your currently running and queued jobs	userjobs
jobload	Report current cpu and memory status of your jobs	jobload -m username

Batch System Status		
freen	Check status of free nodes	freen
batchlim	Check current limits on batch queues	batchlim

Info about current or exited jobs		
jobcheck	Check status of exited jobs	jobcheck -d 2 (<i>all jobs with non-zero exit status in last 2 days</i>) jobcheck -a (<i>all jobs, including those with zero exit status</i>)
submitinfo	See the command used to submit a job. Usually used to resubmit a job or modify submission parameters.	submitinfo jobid
swarminfo	Provide information about swarms. Associates jobids with swarms.	swarminfo -u username -i 5208 --full

Environment Module commands		
module avail	See what versions of programs are available	module avail tophat
module load	Load a program	module load bowtie (<i>loads the latest (default) version of bowtie</i>) module load bowtie/2-2.0.6 (<i>loads v2-2.0.6 of bowtie</i>)
module unload	Unload a program or version of program.	module unload bowtie
module purge	Unload all loaded modules	module purge
module list	See what modules are currently loaded	module list
module display	See exactly what a module does	module display bowtie/2-2.0.6